

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: AHRF1300

DOCUMENT: SCD25302 REV LETTER: E REV DATE: JULY 26, 2016

PAGE NO.: 1 OF 2

### **Specification Status: Released**

Electrical Rating
Voltage: 16Vpc MAX

Insulating Material:

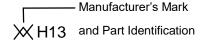
Cured, Flame Retardant Epoxy

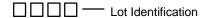
Polymer

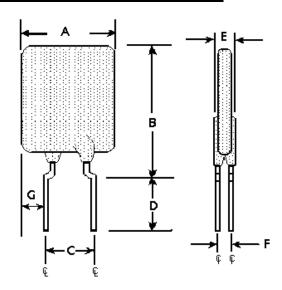
Lead Material:

18 AWG Tin Plated Copper (1.0 mm [0.040] nom. diameter)

Part Marking:







### TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		С		D		E		F	(	G
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:		23.5		28.7	9.4	10.9	7.6			3.5	1.4		7.82
in*:	-	(0.93)	-	(1.13)	(0.37)	(0.43)	(0.30)			(0.14)	(0.06)	-	(0.31)

<sup>\*</sup>Rounded off approximation

#### **TABLE II. PERFORMANCE RATINGS:**

Γ	CURRENT		TIME TO	RESIS	TANCE	Ra MAX	TRIPPED-STATE	
ı	RATINGS		TRIP				POWER	
							DISSIPATION	
	AMPS		SECONDS AT	OHMS		OHMS	WATTS AT	
ı	AT 25°C		25°C, 65 A	AT 25°C		AT 25°C	25°C	
ŀ	HOLD	TRIP	MAX	MIN	MAX		TYP	
Į	13.0	27.0	15.0	.0034	.0069	0.010	6.9	

Reference Documents: PS400, PS300 (reference for R<sub>1 MAX</sub>)

Precedence: This specification takes precedence over documents referenced herein.

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

CAUTION: Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

### **Materials Information**

ROHS Compliant ELV Compliant Pb-Free Halogen Free\*

Directive 2002/95/EC Compliant Directive 2000/53/EC Compliant





Br+Cl≤1500ppm.

<sup>\*</sup> Halogen Free refers to: Br≤900ppm, Cl≤900ppm,



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PAGE NO.: 2 OF 2

#### TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:

ELECTRICAL STRESS TESTS	TEST CONDITIONS (see note 2)		
ESD Voltage Withstand (see note 1)	25kV		
Short Circuit Fault Current Durability	25 cycles, 16V, 200A		
Fault Current Durability	350 cycles, 16V/100A		
End-of-life Mode Verification	1750 cycles, 16V/100A		
Jump Start Endurance (see note 1)	3 cycles, 26V, 1 minute duration		
Load Dump Endurance (see note 1)	10 cycles, 86.5V		

Note 1: The PolySwitch devices are tested in series with a load resistance and the voltages specified in the test conditions

are shared between the PolySwitch device and the load resistance as specified in PS400.

Note 2: Please refer to Appendix A of PS400 for the detailed test procedures

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